

THE CLAIMS

1 1. (currently amended) A method of simultaneously steering and advancing a mining
2 machine having an advancing machine operatively connected thereto, the advancing machine
3 having a plurality of sides, comprising:

4 bracing the advancing machine between side walls of a mine opening independently of
5 the mining machine by a first set of braces fixedly mounted on the advancing machine;

6 moving the mining machine away from the advancing machine while simultaneously
7 steering the mining machine by increasing a distance between the advancing machine and the
8 mining machine by different amounts on two of the plurality of sides;

9 bracing the mining machine between the side walls independently of the advancing
10 machine by a second set of braces fixedly mounted on the mining machine;

11 releasing the advancing machine; and

12 moving the advancing machine toward the mining machine.

1 2. (previously presented) A method according to claim 1, wherein said bracing includes
2 bracing the advancing machine and the mining machine between a roof and a floor of said
3 mine opening.

1 3. (original) A method according to claim 1, wherein said bracing includes bracing the
2 advancing machine between walls of said mine opening.

1 4-9. (canceled)

1 10. (currently amended) An apparatus for simultaneously advancing and steering a mining
2 machine, comprising:

3 an advancing machine independent of the mining machine;

4 ~~an extender~~ two or more extenders operatively coupled between said advancing
5 machine and the mining machine and capable of extension and retraction; and

6 a brace coupled to said advancing machine and being extendable independently of said
7 ~~extender~~ extenders to brace said advancing machine between side walls of a mine opening.

1 11. (canceled)

1 12. (currently amended) An apparatus according to claim 10, wherein said brace
2 comprises ~~[[a]]~~ at least two hydraulic ~~cylinder~~ cylinders.

1 13. (currently amended) An apparatus according to claim 10, wherein said ~~extender~~
2 ~~comprises a~~ extenders comprise hydraulic ~~cylinder~~ cylinders.

1 14. (currently amended) An apparatus according to claim 10, wherein said brace and said
2 ~~extender~~ extenders comprise electrical actuators.

1 15. (original) An apparatus according to claim 10, wherein said brace is extendable to
2 brace said advancing machine between a roof and a floor of said mine opening.

1 16. (original) An apparatus according to claim 10, wherein said brace is extendable to
2 brace said advancing machine between walls of said mine opening.

1 17. (withdrawn) A method of navigating a mining machine including an advancing
2 machine, comprising:

3 bracing the advancing machine within a mine opening;

4 bracing the mining machine within said mine opening;

5 determining a first relative position of the advancing machine and the mining machine;

6 releasing the mining machine;

7 moving the mining machine away from the advancing machine;

8 bracing the mining machine;


9 determining a second relative position of the advancing machine and the mining
10 machine;

11 releasing the advancing machine; and

12 moving the advancing machine toward the mining machine.

1 18. (withdrawn) A method according to claim 17, wherein said determining of relative
2 positions includes measuring at least two variable dimensions between the advancing machine
3 and the mining machine.

1 19. (withdrawn) An apparatus for navigating a mining machine comprising:
2 an advancing machine;
3 a first brace coupled to said advancing machine and being extendable to brace said
4 advancing machine within a mine opening;
5 an extender operatively coupled between said advancing machine and the mining
6 machine and capable of extension and retraction; and
7 a distance measurer operatively coupled to measure at least two dimensions between
8 the mining machine and said advancing machine.



1 20. (withdrawn) An apparatus according to claim 19, further comprising a second brace
2 coupled to the mining machine and being extendable to brace the mining machine within said
3 mine opening.

1 21-22. (canceled)

1 23. (withdrawn) An apparatus according to claim 20, wherein said distance measurer is an
2 integral part of said advancing machine.

1 24-25. (canceled)

1 26. (withdrawn) A method of conveying material from a remote mining machine having a
2 longitudinal axis using conveying units, each unit having a traction element, comprising:
3 assembling at least some of the conveying units into a conveying assembly; and
4 engaging at least some of the traction elements of the conveying units of said
5 conveying assembly to move said conveying assembly.

1 27. (withdrawn) A method according to claim 26, wherein said engaging includes
2 providing a driving force to each of the conveying units of said conveying assembly.

1 28. (withdrawn) A method according to claim 27, wherein said providing includes
2 providing a synchronized driving force to each of the conveying units of said conveying
3 assembly.

1 29. (withdrawn) A method according to claim 26, wherein said assembling includes
2 connecting the conveying units of said conveying assembly to substantially prevent rotation
3 between adjacent conveying units about the longitudinal axis.

1 30. (withdrawn) An apparatus for conveying material from a remote mining machine
2 having a longitudinal axis, comprising:
3 a conveying assembly comprising a plurality of conveying units; and
4 a connector coupling adjacent ones of said conveying units so as to substantially
5 prevent rotation between said adjacent conveying units about the longitudinal axis.

1 31. (withdrawn) An apparatus according to claim 30, wherein at least some of said
2 conveying units include a propelling device.

1 32. (withdrawn) An apparatus according to claim 31 wherein said propelling device
2 comprises powered wheels.

1 33. (withdrawn) An apparatus according to claim 31, further comprising at least one
2 common drive shaft operatively coupled to said propelling device.

1 34. (withdrawn) An apparatus according to claim 33, wherein a plurality of said
2 conveying units include a propelling device and said at least one common drive shaft is
3 operatively coupled to each of said propelling devices.

1 35. (withdrawn) An apparatus according to claim 33, further comprising a power unit
2 located at a discharge end of said conveying assembly operatively coupled to drive said at
3 least one common drive shaft.

1 36. (withdrawn) An apparatus according to claim 33, further comprising a power unit
2 located at a feed end of said conveying assembly operatively coupled to drive said at least one
3 common drive shaft.

1 37. (withdrawn) An apparatus according to claim 33, further comprising a power unit
2 located at a discharge end of said conveying assembly and a power unit located at a feed end
3 of said conveying assembly, said power units being operatively coupled to drive said at least
4 one common drive shaft.

1 38. (withdrawn) An apparatus according to claim 30, wherein said connector comprises:

2 a pin on a first conveying unit of said adjacent conveying units;

3 a fork positioned on a second conveying unit of said adjacent conveying units, said

4 fork able to engage and disengage said pin; and

5 a hook movably positioned on either said first or said second conveying unit and

6 having a first position, in which said hook couples said adjacent conveying units, while

7 allowing limited relative motion between said adjacent conveying units about an axis

8 substantially perpendicular to the longitudinal axis, and a second position, in which said hook

9 does not couple said adjacent conveying units.

1 39. (withdrawn) An apparatus according to claim 38, wherein said fork has an opening

2 with a size greater than a size of said pin for allowing a limited relative motion between said

3 adjacent conveying units the longitudinal axis.

1 40. (withdrawn) An apparatus according to claim 38, further comprising a spring

2 operatively connected to bias the position of said hook.

1 41. (previously presented) A method according to claim 1, wherein the mining machine

2 further includes an extender operatively coupled to the advancing machine, and wherein said

3 bracing the advancing machine includes bracing the advancing machine independently of the

4 extender.

1 42. (previously presented) A method according to claim 4, wherein the mining machine
2 further includes an extender operatively coupled to the advancing machine, and wherein said
3 bracing the advancing machine includes bracing the advancing machine independently of the
4 extender.

1 43. (previously presented) A method according to claim 7, wherein the mining machine
2 further includes an extender operatively coupled to the advancing machine, and wherein said
3 bracing the advancing machine includes bracing the advancing machine independently of the
4 extender.

1 44. (previously presented) An apparatus according to claim 10, wherein the brace is
2 fixedly mounted on the advancing machine.
